



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:)	
Craig A. SCHEER et al.)	Docket No. SCATP001
Application No. 10/074,354)	Examiner: Y. Tadesse
Filed: February 11, 2002)	Group Art Unit: 1734
For: PARTICLE DEPOSITION SYSTEM)	
WITH ENHANCED SPEED AND)	
DIAMETER ACCURACY)	

DECLARATION UNDER 37 C.F.R. § 1.131

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

We, Craig A. Scheer and John C. Stover, declare as follows:

1. We are the inventors named in the above-identified patent application ("the subject application"). We understand that claims 24-26 of the subject application have been rejected based on the subject matter disclosed in U.S. Patent Publication No. US 2002/0100416 A1 to *Sun et al.* ("the *Sun et al.* reference"). The *Sun et al.* reference was published on August 1, 2002, and the underlying patent application was filed on January 30, 2001.

2. We built and successfully operated a particle deposition system having the features set forth in independent claim 24 of the subject application before January 30, 2001, the effective date of the *Sun et al.* reference. The facts supporting this statement are set forth below in Paragraphs 3-7.

3. We conceived and designed a particle deposition system in the Summer of 1999. Upon completion of the design, we hired Michael Caruso of Niagara Design, a firm located in Charlotte, North Carolina, to help us build the particle deposition system. Working under our

direction and control, Mr. Caruso and others manufactured the particle deposition system, and the system was completed in December of 1999. Exhibit A is a "Fabricated Metallic Parts List" dated August 6, 1999. This parts list, which was prepared by Niagara Design on behalf of The Scatter Works (the assignee of the subject application), itemizes the fabricated metallic parts needed to assemble the particle deposition system. Exhibit B is a "Purchase Parts List" dated November 16, 1999. This parts list, which also was prepared by Niagara Design, itemizes some of the electronic parts needed to assemble the particle deposition system.

4. Upon completion, the particle deposition system was successfully operated in Charlotte, North Carolina.

5. The particle deposition system was moved from Charlotte, North Carolina to Westwood, Massachusetts for safety testing. This safety testing took place from January 2000 to March 2000. Exhibit C is a copy of a picture of the particle deposition system as it existed on January 4, 2000. On April 3-4, 2000, the prototype particle deposition system received SEMI S2-93A certification. The final certification report was issued on May 18, 2000. Exhibit D is a copy of a cover page (page v) from the final certification report.

6. On February 9, 2001, we filed a provisional patent application entitled "A Particle Deposition System with Enhanced Speed and Diameter Accuracy" in the U.S. Patent and Trademark Office. This provisional patent application was assigned Application No. 60/267,613. A copy of the as-filed provisional application is attached as Exhibit E. The schematic diagram labeled as Figure 1 in Application No. 60/267,613 (see page 4) shows the layout of the particle deposition system that was completed in December of 1999.

7. Independent claim 24 of the subject application defines a particle deposition system that includes an atomizer, a flow control device coupled in flow communication with the atomizer, a differential mobility analyzer coupled in flow communication with the flow

control device, and a deposition chamber coupled in flow communication with the flow control device and the differential mobility analyzer. The particle deposition system completed in December of 1999 includes each of the components specified in claim 24. In support of this statement, we note that each of the components specified in claim 24 is shown in the schematic diagram labeled as Figure 1 in Application No. 60/267,613. As stated in Paragraph 6, this schematic diagram shows the layout of the particle deposition system that was completed in December of 1999.

8. We declare that all statements made herein of our own knowledge are true; that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: _____

Signature: _____
Craig A. Scheer

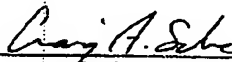
Date: _____

Signature: _____
John C. Stover

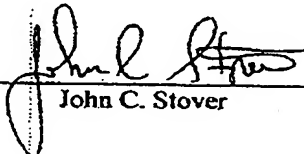
control device, and a deposition chamber coupled in flow communication with the flow control device and the differential mobility analyzer. The particle deposition system completed in December of 1999 includes each of the components specified in claim 24. In support of this statement, we note that each of the components specified in claim 24 is shown in the schematic diagram labeled as Figure 1 in Application No. 60/267,613. As stated in Paragraph 6, this schematic diagram shows the layout of the particle deposition system that was completed in December of 1999.

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Date: 4/28/04

Signature: 
Craig A. Scheer

Date: 4/28/04

Signature: 
John C. Stover